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February 19, 2016

BY ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Use of Spectrum Bands Above 24 GHz for Mobile Radio Services *et al.*, GN Docket No. 14-177; IB Docket Nos. 15-256 and 97-95; RM-11664; WT Docket No. 10-112

Dear Ms. Dortch:

On February 18, 2016, EchoStar Satellite Operating Corporation, Hughes Network Systems, LLC and Alta Wireless, Inc. (collectively "EchoStar") met with the following FCC staff members to discuss the above-captioned proceeding: Barbara Pavon, Michael Ha, and Sundaresan Thaila from the Office of Engineering and Technology ("OET"); Brian Regan, Blaise Scinto, Nancy Zaczek, Simon Banyai, John Schauble, and Catherine Schroeder from the Wireless Telecommunications Bureau ("WTB"); Jose Albuquerque and Robert Nelson from the International Bureau; and Greg Intoccia and Ahmed Lahjouji of the Public Safety and Homeland Security Bureau. Attending the meeting by phone were Stephen Buenzow, Tim Hilfiger and Charles Oliver from WTB and Bahman Badipour from OET. EchoStar was represented by Jennifer A. Manner, Vice President, Regulatory Affairs; Stan Kay, Vice President Advanced Development; Alexander Gerdenitsch, Senior Principal Engineer, Regulatory Affairs; Deborah Broderson, Communications Regulatory Counsel and Director; and Bill Wiltshire, counsel for EchoStar.

In the meeting, EchoStar's presentation followed the attached talking points.

This letter is submitted consistent with the Commission's ex parte rules. Please direct any questions concerning this filing to the undersigned.

Sincerely,

/s/

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Jennifer A. Manner
Vice President, Regulatory Affairs
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cc: Barbara Pavon
Michael Ha
Sundaresan Thaila
Brian Regan
Blaise Scinto
Nancy Zaczek
Simon Banyai
John Schauble
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Jose Albuquerque
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Spectrum Frontiers: An Opportunity to Promote Efficient and Flexible Use of Frequency Bands Above 24 GHz for Satellite and Terrestrial Use

Overview

- EchoStar,[1] the largest U.S. commercial fixed satellite service (FSS) geostationary (GSO) satellite operator and the largest provider of global satellite broadband, including in the United States, supports the Commission's efforts to develop a flexible spectrum regime in the 28 GHz (27.5-28.35 GHz) and the 38 GHz (37.0-38.6 GHz and 38.6-40.0 GHz) bands in order to meet increasing demand for broadband connectivity.
- EchoStar has invested billions of dollars in designing, constructing and operating its broadband satellite network which provides services to approximately one million customers in North America. With the launch of the EchoStar XIX satellite later this year, EchoStar will bring significant additional capacity in the Ka band (including the 28 GHz band) to U.S. consumers at speeds as high as 25/3 Mbps.
- EchoStar is already designing its next generation satellites, which will likely include the use of spectrum in the38 GHz band.
- Designating terrestrial mobile and FSS earth station licenses as co-primary in the 28 GHz and the 38 GHz bands will encourage investment, enable the most efficient use of the spectrum resource, incentivize innovation and expand deployment by both satellite and terrestrial operators to ensure all U.S. consumers have access to broadband services.

Long-Term Access to the 28 GHz and 38 GHz Bands Is Essential for Satellite Operations

- In order to ensure that U.S. consumers, wherever they are, can continue to receive critical broadband services, the FCC must ensure that FSS systems can continue to operate and expand their services to meet consumer demand.
    - Satellite broadband supports important consumer, governmental, public safety, educational, and health-related activities, and provides vital connectivity during natural disasters or emergencies when terrestrial networks have failed or are unreliable.
    - FSS also supports other broadband operations, including terrestrial mobile systems, by providing backhaul and other services.
- Because satellite technology has a long development path and is highly capital intensive, regulatory certainty and access to broad swaths of contiguous spectrum is critical to investment in satellite broadband that will allow the deployment of next-generation services.
- Providing co-primary status in the 28 GHz band for FSS gateway earth stations and adopting a band segmentation plan for the 38 GHz band that designates FSS gateways and user terminals as the primary use for a portion of the band would enable the use of these bands for both important satellite and terrestrial uses.

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[1] For purposes of this filing, EchoStar comprises EchoStar Satellite Operating Corporation, Alta Wireless, Inc. and Hughes Network Systems, LLC.

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Satellite and Terrestrial Mobile Services Can Share the 28 and 38 GHz bands

- There is no technological barrier that prevents terrestrial operators from deploying 5G networks while protecting existing and planned satellite uses of the 28 GHz and 38 GHz bands.
- In the 28 GHz band, designating FSS gateways co-primary with terrestrial mobile services would not affect the deployment of 5G systems besides of a few non-urban very small areas.
    - The FCC could protect existing gateway earth stations and set aside licenses in this band in less densely populated areas for use by FSS gateways.
- In the 38 GHz band, FSS earth stations and FSS user terminals will not affect 5G systems as this band is a receive band for FSS deployment.
- Establishing separate co-primary allocations for 5G services and FSS earth stations incl. FSS user terminals in the 38 GHz band will maximize spectrum efficiency and flexibility.
    - Segmenting the 38 GHz band allows all services to operate in the 3 GHz of available spectrum.

Auctions for Satellite Spectrum Would Be Inefficient and Unlawful

- Requiring satellite licensees to bid on FSS gateway spectrum would not adequately protect the reasonable expectations of FSS licensees, would discourage innovation and investment by satellite operators, and would violate the provisions of the ORBIT Act.